

## INTRODUCTION

Public debt is a modern invention and was not heard prior to 18th century. Bastable holds that in its present form, the public debt is the creation of the last two centuries. The monarchs used to amass treasure in peace to be used in the times of need. The practice of raising loans grew gradually.

In the middle ages, there was a strong sentiment against usury. The king borrowed money on personal credit or pledged his domains as security. The loans were obtained from the church or from foreign bankers. Borrowings became common in England and France with an increase in the cost of government.

In the nineteenth century, under the influence of '*Laissez faire*' philosophy, economic life was restricted only to unavoidable minimum duties of the state with the result that functions performed by the State were only essential few. But in the modern times, the growth of public debt is the result of changing economic and political institutions.

"Public debt is a comparatively modern phenomenon and has come into existence with the development of democratic form of Government in the world."<sup>1</sup>

Prof. J.K. Mehta

Therefore, the growth of public debt is the result of changed economic and political situation all over the world. Today, borrowing by the government has become a normal feature of government finance alongwith the other sources of public finance like taxes, fees etc. In all the countries of the world, public debt tendency has been increasing. In fact, the burden of external debt of these countries has been mounting constantly year after year adding to the grave situations to the underdeveloped and poor countries.

Here, one point must be kept in view that there is a significant difference in the composition of debt of advanced countries and that of developing countries. For instance, total public borrowings of poor and underdeveloped countries consist of a large part of

borrowings made from abroad while in the case of developed countries, it may comprise mainly the borrowings raised internally from the local authorities, institutions and individuals. In this regard, American economists like Taylor have clearly emphasised the internal debt on one side while others in India favoured foreign debt. Any how, both are the main constituents of public debt.

## MEANING OF PUBLIC DEBT

Public debt in simple words refers to loans raised by a government within the country or outside the country. Every government like individuals has to borrow when its expenditure exceeds its revenue. But it is not a source of revenue like taxes. Of course, in wider sense, the term public revenue covers all types of income. Hence, public revenue includes the money borrowed by the government. The amount borrowed by the government during any given year constitutes the income of that year. We may call, therefore, public debt as 'revenue' of the government. The loans raised or any debt incurred or received in a year constitute the income of the government like other taxes levied or collected in a year. But the basic difference between the public debt and other sources of revenue is that while public debt has to be paid back by the government; the other types of income are not to be paid back. The government collects taxes from the public without any commitment or promise. But public loans or debts are collected by the treasury or government from banks, institutions and individuals on the conditions given in writing that these would be repaid and interest would be paid regularly either yearly or half-yearly as per terms of the loan. The terms of interest on these loans have also to be selected under these conditions.

However, the concept of public debt has been defined by various economists.

**"Public revenue, therefore, consists of the money that the government is not obliged to return to the very individual from whom it is obtained. Public debt on the other hand, carries with it the obligation on the part of the government to pay money back to the individuals from whom it has been obtained."** Prof. J.K. Mehta

**"National Debt is a debt which a state owes to its subject or to the nationals of other countries."** Prof. Findlay Shirras

**"The debt is the form of promises by the Treasury to pay to the holders of these promises a principal sum and in most instances interest on that principal. Borrowings is restored to in order to provide funds for financing a current deficit."**

Prof. P.E. Taylor

**"The receipt from the sale of financial instrument by the government to individuals or firms in the private sector to induce the private sector to release manpower and real resource and to finance the purchase of those resources or to make welfare payments or subsidies."**<sup>2</sup> Prof. Carl S. Shoup

## DIFFERENCE BETWEEN DEBT AND PRIVATE DEBT

There are similarities and dissimilarities between private and public debt. The government is almost in the same position as is a private borrower in case of acquiring public borrowing. Public authorities borrow funds to acquire certain resources. Similarly, private individuals make use of the borrowed funds to acquire certain resources. Both public

and private borrowing involve diversion of funds from one type of use to another. The government may borrow either for consumption or for investment purposes like a private borrower. The public authorities and private individuals also pay interest on these borrowings. Despite these similarities, there are many dissimilarities between these two kinds of debt.

### The main points of difference between private and public debt are given as under :

1. The government is sovereign and it has the power of compulsion. In the times of war or economic crisis in the country, the government can compel the people to lend money to the government. Under these circumstances, the government may refuse to pay back the debt though such position never occurs. But in the case of private debt, no private individual can force or compel other private individuals to lend him.
2. The government prevails for a longer time and it is possible to take loans for a longer period while a private person can borrow only for a short period of time.
3. The loan taken by the government is generally spent on productive purposes but an individual may spend the money borrowed both for productive as well as for non-productive purposes.
4. The government may borrow from the sources inside the country as well as from the external sources like foreign countries. But it is very difficult to borrow from the external countries for a private individual.
5. The government generally borrows money to spend for the welfare of the society. The government utilises the loans for the development schemes which have been started for the common welfare of the community. But the private debt is not used for the society, and its main aim is profit earning. In other words, it is done to maximise the profit.
6. The government repays its loans through taxing the people. Additional taxes are imposed on the public to repay the borrowed money. In this way, the creditors have their own contribution that they have paid taxes for the repayment of loans. In other words, the burden of the public debt is shared by the public collectively. But on the other hand, it is impossible for a private borrower to levy taxes. He has to repay his debt either out of his personal earning or out of his savings or by borrowing from other sources.
7. Rate of interest paid by the government is very low as compared to rate of interest paid by a private borrower. The government can reduce the rate of interest payable on public loans but for a private borrower it is not possible. He has to pay the rate of interest which he has promised to pay at the time of borrowing.
8. The public debt makes its effect on the production and distribution of wealth and income in the country. But, the loan taken by a private person makes no such effect, because of being a small amount.
9. The credit of a government is very high and it is possible for it to borrow the amount at cheaper rates. But it is not possible for the private person as the government is more trustworthy than a private individual.
10. The government can repudiate the payment of loans taken by it from the public in some critical conditions but for a private individual, it is very difficult to refuse the payment of loans under any circumstances. The state, however, normally takes this step in very rare circumstances because such an act will greatly damage the reputation of the government.

## OBJECTIVES AND IMPORTANCE OF PUBLIC DEBT

In the past, the way of living was very simple, and the borrowing was not very significant. The government budgets were very small. The government also followed the policy of non-intervention in economic system. But in modern times, especially after the world depression of 1929-30, the public authorities started to take keen interest in the economic development of their respective countries. Thus, public borrowing has become *sine qua non* for the economic development of a nation. The government activity is expanding vastly and without public borrowing, it is not possible to work on such heavy projects. In this way, it has become part and parcel of the instrument of fiscal policy for the economic development of underdeveloped as well as for the developed countries. Now-a-days, an extra ordinary increase in public debt is considered good as it brings to the economy the capability of repaying the debt as it is spent on productive purposes. The crucial objectives and importance of public debt are being mentioned as below :

**1. For the Maintenance of Balance between Expenditure and Revenue.** The most important aim of public debt raised by the government is to fill the gap between the revenue received by the government and proposed expenditure during the year. The government may borrow money from internal or external resources as government falls short of its expenditure. This income of the state is over and above all taxes and other revenue resources. But debt incurred is the income of the state for the year alone. Hence, it will have to be repaid through taxation or other resources. The government borrows money from internal and external sources in order to meet certain unforeseen calamities like floods, famines etc.

**2. Fighting Depression.** Depression is a competition of falling prices, slackness of productive activities and no hope for profitability in the economy. To eradicate the evils of depression, public debt is the most indispensable tool of financial management. Depression does not mean that there is *no* money with the public. But the money remains unutilised due to the lack of entrepreneurship. Nobody is ready to invest money as there is less profit or very low expectations. At such a stage, the government can utilise this money by raising loans and increasing the public expenditure on public works in the country. This would increase the effective demand of the people through the combined operation of multiplier and acceleration. On the other side, the private enterprise may be willing, but due to shortage of funds, he may not be in a position to enhance production and thereby to raise output and employment. In this situation, the government may borrow from the banks and release the funds for supplementing the private enterprise. The government may be able to lift the depressed economy to recovery which in turn leads to prosperity, either by ensuring new money or by activating the idle resource by raising loans. As a result, it would help in checking the falling prices and divert the economy to the path of growth and prosperity. Hence, public debt plays vital role during the period of depression.

**3. To curb Inflation.** It is a condition of rising prices in the economy. It is a serious threat to the smooth and harmonious development of the economy. By raising debts, the government can withdraw a large volume of money from the public and check prices from rising. Some modern economists suggest taxation as the better mode of curbing the inflationary trend as compared to public debt. It is because money received through public borrowing increases the liabilities of the government for its repayment if the amount taken has not been properly utilised in productive channel. But such a surplus revenue amount may easily be left idle in the treasury to curb the inflationary pressures. As the monetary policy alone is not much successful in curbing the inflation, fiscal policy, of which public

## PUBLIC DEBT

debt is the major tool, has attained greater significance since the First World War period. Hence, the best way to curb public spending is to borrow from the public.

**4. Financing Economic Development.** Underdeveloped countries always face the problem of funds. Taxation capacity of such a nation is also very low. Moreover, taxation is resented if heavily imposed on the public. But to save the economy from the vicious circle of poverty, the need for finance is necessary. Under such circumstances, public debt is the only way left with the government. The government may borrow from the persons within the country who are able to lend or from the resources outside the country and both are to finance development expenditures i.e. bring the change in structure and creation of social overheads etc.

**5. To meet Unprecedented Expenses.** Sometimes, the government raises loans to meet the unprecedented events like famines, floods, earthquakes and epidemics etc. The funds are raised by the government as the government is committed to incur a much large expenditure. Again, such cases of emergencies and calamities lead to a sudden spurt in expenditure of the government.

**6. To Check the Cyclical Fluctuation.** After world depression, every government is conscious about the various cyclical fluctuations which occur in the economy. These cyclical fluctuations generally lead to many disastrous consequences. Therefore, to control these cyclical fluctuations, is one of the chief objectives of the debt policy of the government. By raising loans, the government can finance the production activities when it tends towards recession, thus, preventing it from the evils of depression.

**7. Unpopularity of Taxation.** Public is least interested in paying taxes to the government. Any kind of tax is resented by the public whether old or new. They always oppose the enhancement of old rates of taxation as well as the imposition of new taxes. At this critical juncture, the government adopts an easy process of resorting to public debt to save its skin from the public opposition.

**8. War Finance.** Modern age is an atomic age. In the age of atomic warfare, international tension is increasing day-by-day. A country needs a huge amount to maintain its defence services and up-to-date equipment to protect from foreign aggression. So for this purpose, government borrows money.

"....no specific can be too great that are required to preserve national security and independence and a loan expended on armies or fleets employed for such a purpose is quite as well and profitably employed as if it had been laid out on agriculture or in promoting manufactures or trade."<sup>3</sup>

*Findlay Shirras*

Modern warfare requires huge amounts of money and they are not met by taxation alone. Taxation cannot be raised beyond a certain limit. Therefore, public loan borrowing is a better method. Thus, government may resort to public borrowing to raise additional resources and transfer resources from the civilian sector to the military sector.

**9. To Finance Public Enterprises.** Public sector is directly under the control of the government as public sector has been recognised to play a major role in the economic development, growth and prosperity. For financing public enterprises, the government may borrow. So at first, the government needs finance to meet the needs of these enterprises and, hence it, borrows. Only taxation is not sufficient for these purposes. Therefore, modern governments have been resorting to extensive borrowings.

3. *Findlay Shirras, 'Public Finance'.*

**10. For Better Allocation of Resources.** To avoid the misallocation of resources, the government may act to put the existing level of resources at an optimum level. Misallocation of resources is generally created by monopolistic competition. The government has to take over these monopolistic firms or encourage the entry of other firms so that the misallocation of resources may be checked. For this, the government has to provide long term finance and the government itself has to borrow to meet the needs of such firms.

**11. Expansion of Education and Public Health Services.** In modern times, governments are welfare governments who are responsible for the expansion of education and health services which further improves the efficiency of the people. For this purpose, generally, government borrows from internal or external resources in order to meet these requirements.

**12. Creation of Infrastructure.** Generally, public government borrows for the creation of infrastructure in an economy. They include the development of railway, communication, dams etc. These types of investments are not much attractive for the private businessmen and fail to create social overhead gains for the society.

## SOURCES OF PUBLIC BORROWING

There are two major resources of public borrowings, internal and external. Internally, the government can borrow from individuals, commercial bank, financial institutions, charitable trusts and the central banks in a country. Externally, the government can borrow from individuals, banks, international financial institutions and foreign governments. Here, it is necessary to mention that the true effects of public borrowings will depend upon the sources of borrowed funds to a greater extent.

However, we shall brief these different sources of borrowing.

**1. Borrowing from Individuals.** When individuals purchase government bonds, they are diverting funds from the private use to the government use. In such a case, there is a little direct effect in curtailing either consumption or business investment. In other words, individuals may be able to subscribe to government bonds either through curtailment of current consumption or through diversion of funds meant for one's own business or diverting funds into government bonds from securities. Generally, sale of government bonds to individuals should not curtail either consumption or business expansion. To a greater extent, these bonds will be absorbed out of the funds that would have been lying idle or would have been used to buy other securities. In short, every individual possesses a very small amount to be spent on small project while the government may use the entire amount in building a big project.

**2. Borrowing from Non-Banking Financial Institutions.** Borrowing from the Non-Banking Financial institutions is another source of borrowing. They are insurance companies, trusts, savings banks etc. By buying government bonds, these institutions reduce their idle cash balances, when they make investment in government bonds. They prefer government bonds because security is provided by the government and they possess high negotiability and liquidity. The rate of interest paid by the government is relatively low. As a result, in many cases these institutions may prefer high risk and high return securities, especially in the equity shares. However, when the non-banking institutions buy government bonds, they do so to reduce their cash holdings.

**3. Borrowing from Commercial Banks.** Individuals and non-banking financial institutions take up government bonds out of their own cash funds. But commercial banks can do so by creating additional purchasing power which is popularly known as credit creation. The

banking system can make additional loans upto an amount several times as great as the excess cash reserves and required reserves ratio. This credit creation is possible because the loans the bankers make, are typically added to the borrower's account and are, in turn, paid to persons having accounts with other banks. Result of this process is that so long as the cash is not withdrawn from the banks, it serves as the basis for the expansion of loans.

The creation of credit by commercial banks can subscribe to the government loans. The banks need not contract their other loans and advances. The banks whenever have excess cash reserves, are able to absorb an amount of government bonds greater than the excess cash reserves. Therefore, in this process of creating additional purchasing power, if the banks place it at the disposal of the government to finance the latter's expenditure; pressure of inflation will be generated provided the economy is working at full employment previously.

**4. Borrowing from the Central Bank.** The central bank of the country can subscribe to government loans. This action is similar to the system of creating purchasing power by the commercial banks. The central banks credit the account of the government by purchasing government bonds. The latter pays to its creditors out of its accounts maintained with the central bank. Those who have received cheques from the government on the central bank will deposit the amount in their banks. Consequently, these banks find themselves with large cash reserves which become the basis for additional loans and advances. It must be mentioned here that the borrowing from the central bank is the most expansionary of all the sources for not only the government secures funds for its expenditure but the banking system gets additional cash. This amount can be utilised as the basis for further credit expansion. On the contrary, the borrowings from individuals and financed institutions are merely transfer of funds from private to government use and so, it will not be expansionary in their effect on the economy.

## BORROWING FROM EXTERNAL SOURCES

Government may borrow from other countries, apart from borrowing from individuals and financial institutions within the country. The borrowings can be used to finance war expenditure or to buy defence equipment or to pay for the development projects or to pay off adverse balance of payments. In the past, floating of loans for any specific projects like railway or dam construction was taken up by individual, banking and other financial institutions. But in recent years, two important external sources of government borrowing are prominent as (i) international financial institutions like I.M.F. and I.B.R.D.; the I.D.A. and the I.F.C. These institutions give loans to member countries for a short-term period covering temporary balance of payment difficulties and for long term for development projects ; (ii) government assistance from friendly nations which is mainly used for development projects. In developing countries like India, external source of borrowing has become significant. India has also received massive assistance from the 'Aid India Club'.

## CLASSIFICATION OF PUBLIC DEBT

Public debt can be classified into different categories in many ways. The difference arises on account of many factors, such as to the market in which the loans are floated, conditions of repayment, purpose of borrowing for which they are raised etc.

Its classification or different forms of public debt have been underlined :

1. Internal and External Debt.

## DANGERS OF PUBLIC DEBT

Public debt is not always blessing. Excessive use of it creates a lot of monetary crises in the economy. Adam Smith opposed any use of public debt. Expressing his view point, he writes, "Public debt leads to extravagance, encourages resort to war and induces generally disadvantageous economic conditions for the nation which employed it". Similarly,

**"A nation cannot, any more than an individual keep adding continually to its liabilities without at least coming to the end of its resources."<sup>5</sup>** *C.E. Bastable*

Therefore, public debt has been considered hazardous for the economy. It is no longer a cake eating feast but rather a careful and efficient brain to handle the management of the public debt.

**"Government must remember that borrowing is not a short cut to prosperity and a policy of borrowing must be retreated except for what can reasonably be regarded as productive expenditure."** *Prof. Findlay Shirras*

However, the dangers of public debt are undermentioned:

**1. Extravagance.** Public debt, generally, is considered as an easy money which leads to reckless borrowings. This provides incentives to the governments to implement those schemes also which require abundant expenditures. The temptation of over. Borrow always offers dangerous results like bankruptcy or repudiation of debts.

**2. Loans for Unproductive Purposes.** It has been observed that governments find no difficulty in borrowings and this makes the brighter chances of unproductive loans whose burden falls on the common masses of the society. Excessive expenditure on war and armaments are the good examples of such loans.

**3. It hampers the Economic Development of a Country.** Though loans are easily borrowed but it is exclusively difficult to repay with interest. Generally, government taxes more and more to repay the debt and this raises the unnecessary burden on the tax-payers. This brings instability in the economy which in turn hampers the economic development of the country.

**4. Adverse Effects on Production and Distribution.** Unproductive public loans have become a permanent feature of burden on the economy which leads to unfavourable effect on production and distribution of the country.

**5. Challenge to the Political Freedom.** Foreign loans and assistance gives the clear cut evidence of diplomatic motives behind it. Instead of promoting international peace and understanding, it leads to deep conflict among countries. The friction, further challenges the political freedom. Thus it sows the seeds of hatred and national independence ruins.

**6. Flow of National Wealth.** Foreign loans result in the drain of wealth out of the country.

The study of the disadvantages of public debt, sometimes suggests that neither dependence nor ignoring is good. It has a mixed blessing. Even then, it is agreed that government should not resort to it and public expenditure should primarily be met through taxation. In other words, government should borrow only when it is a must.

## **EFFECTS OF PUBLIC DEBT**

Public debt operations like taxation and public expenditure involve the transfer of purchasing power from one section of the society to another.

*Prof. Dalton* "When the government floats a loan, money is transferred from the purchasers of government securities to government and finally to those on whom the government spends this money. When the interest on the public debt is paid, it is merely the transfer of purchasing power from those who are taxed for this purpose to the holder of securities and when the public debt is repaid, there is another transfer of purchasing power. In modern times, it is generally accepted that taxation and borrowing can be utilised for either type of expenditure depending upon the circumstances. The economic effects of the government expenditure which is financed by public borrowings are different from the effects of similar expenditure financed by taxation as (a) The wealth of tax-payers is curtailed by taxation and loans do not reduce the wealth of the lenders but it merely changes its form. (b) The funds are transferred from public to the government compulsorily in case of taxation but under borrowing such a transfer of funds is voluntary.

We can divide the effects of public debt on the economy in the following two categories:

1. Revenue effects of public debt.
2. Expenditure effects of public debt.

Firstly, the people have to change their budgets, if the money is raised by means of a loan. It may not reduce the consumption expenditure directly as in case of taxation because it is not out of current incomes but out of past savings. It is generally seen that public loans are purchased by the people but it is sure that raising of money affects the overall expenditure, consumption and capital expenditure.

On the other hand, the benefits conferred on people by the expenditure of the money raised by public loans have another kind of effect on the economy. It is not essential that the benefits are always different from those conferred by spending the money raised by taxes, provided the borrowed money is utilised for the same purpose as the money raised by taxes itself. Here, it must be remembered that the effect of public debt basically depends upon the purpose for which debt is taken, the terms and conditions at which the debt is floated, sources of borrowings, types of loans, volume of public debt and interest rates etc.

Let us briefly explain the effects of public debt on consumption, production, distribution and other sectors of the economy.

(i) **Effects on Consumption.** Consumption of the individuals has been greatly affected by the public debt. Although, it is assumed that people purchase securities out of their past savings but it is not always necessary. It can be possible that people buy government securities by curtailing their expenditure on current consumption. In this way, consumption is affected in the same manner as it is affected by taxes. But when the people buy government securities out of their past saving, it has limited effects. This has no direct effect on the present expenditure of the people. Generally, motivation to save through bonds and securities of small amounts keep the people away from spending more and more on consumption and as a result of those people reduce their consumption or cuts its size. They realise the additional feelings of security. Consequently, the net effect of public debt is to increase the percentage of total income spent on consumption and further an expansionary effect on the economy.

(ii) **Effect on Investment.** Public debt may also affect adversely the incentive of investment. The commercial banks have excess cash reserves. So the sale of bonds to these banks increases the purchasing power through credit creation. Hence, it should not curtail its investment. On the contrary, the sale of these bonds to the individuals reduces the funds which they have kept for the expansion of their own business activities. There will be no adverse effect if the individuals purchase these bonds out of their surplus funds. However,

there is an indirect effect of the public debt. The growth of public debt may give rise to the fear of increased taxes in future. If the people feel that the public debt may result in higher taxes in future, the profitability of investment in the long-run will appear to be less.

(iii) **Effect on Production.** Public debt affects the production if it is taken enormously. There is hardly any significant effect if the size of public debt is small. People purchase securities out of their surplus income and it does not affect the capital used for investments. But if the public debt is big in size, it will affect the production because its payment is made by diverting capital for the private investments. Such purchase of government securities reduces the private capital which in turn checks the economic development. The government imposes heavy taxes for the repayment of such heavy public debts. It affects the people's willingness to work. Besides, the existence of huge debts creates the fear of the imposition of levies or even repudiation of debt. In short, this would adversely affect the people's desire to work and thus save production. However, the effects of public debt must consider the effects of the expenditure of borrowed money as state is mostly guided by the larger interests of the society as a whole. Therefore, when public borrowing is utilised to meet current deficits or war expenditure, it causes diversions which reduce production.

(iv) **Effect on Distribution.** Public borrowing leads to transfer of purchasing power from one section of the society to another. Generally, rich section of the society purchases government securities, but the burden of tax falls upon the common people *i.e.* poor people. Thus, public borrowings increase the inequalities of income and public debt adversely affects the distribution of income. If the bond-purchasers and the tax-payers are the same persons, the redistribution of income will not occur thus, increasing the gap of inequalities of income. *Prof. Dalton* calls it direct real burden. Its effect can also be assessed by the way in which the public debt is used. If the money borrowed is spent on the welfare schemes of poor people, it will decrease the inequality of income and it will ensure equal distribution of income among different sections of the society. But on the contrary, if the public borrowings and spending create inflation, its favorable effects on distribution of income can be neutralised due to rise in prices.

**"It is sometimes said that public debts tend to make permanent differences between the interest receiving and the interest paying classes and in this respect are open to social objective."**

*Prof. Findlay Shirras*

(v) **Effect on National Income.** Public debt will have very mild effect on the economy under usual circumstances while the net effect of a programme of government expenditure financed by borrowing is almost liable to be expansionary. This effect will be more expansionary than that arising from the financing of the same expenditure by taxation. This carries no adverse effect of borrowings on consumption and investment. In other words, when investment is reduced, it relatively reduces output of capital goods. On the contrary, if government expenditure is incurred on capital goods, it provides incentives for accelerated production and it gives rise to national income. Further, if the government bonds are purchased by central bank, and the commercial banks, the borrowing and the expenditure of the borrowed funds will have a considerable expansionary effect in the economy.

(vi) **Effect on Resource Allocation.** The public debt unlike tax finance, has little effect on resource allocation. To a greater extent, public borrowing curtail business investment activities while decline of investment varies from one industry to another. In this way, allocation of resource are not much affected by the manner of financing these units.

(vii) **Effect on Liquidity.** Public debt is generally represented by bonds which are highly negotiable. Therefore, those people who hold bonds possess highly liquidity form of assets. These assets (bonds) can easily be converted into cash whenever any individual needs more funds for any purpose of transactions, precautionary and speculative motives. So, public debt is responsible for the existence of highly liquid form of assets. Furthermore, another

important effect of the highly liquid government bonds can also be seen in the case of commercial central banks. In times of inflation, the central bank attempts to adopt various devices like bank rate, open market operations to restrict the commercial banks to reduce their credit expansion. However, it must be noted here that commercial banks can increase the cash/reserves through disposing of their government bonds.

**(viii) Effect on Private Sector.** All public expenditures increase the level of demand for the goods produced by the private enterprises as every unit of money spent raises the purchasing power of the people. It puts more money into circulation. However, when this type of public expenditure is financed through taxes, current consumption is reduced but on the other hand, when it is financed through public borrowings, current consumption is not reduced because idle savings are utilised in purchasing of bonds. Therefore, if the government uses the public borrowings in purchasing of goods and services produced by the public sector enterprises, the demand for goods in private sector may increase to the extent that government spends borrowed funds for purchasing of these goods and services.

Similarly, if the borrowed money is utilised on salaries and wages of the government officials, it may further increase their purchasing power enlarging its demand for goods produced by the private sector enterprises without affecting the supply of the goods and services. In this way, the effect of expenditure of borrowed funds is considered favourable.

**(ix) Effect on the Working of the Money Market.** Public debt affects the money market when the demand for money in private sector is on the higher side and the state government fixes higher interest and vice-versa. Therefore, there is a severe competition with the private investors if the government borrows from the general public. This is because total available supply of investment funds increases in the market. On the other side, if government borrows from the banks, there are chances of more currency expansion.

It is not only that the economic stability can be ensured through open market operation but well managed public debt can also be regulated through variations in the size, composition and yield of public debt so that proper climate helps to bring stability in the economy.

**(x) Financing of Economic Development.** In underdeveloped countries where there is a large non-monetised sector, public debt has a favourable impact on economic development. One of the conditions of economic growth is existence of a large monetised sector. The financial structure of economic and credit system, the banking system and financial transactions develop as a result of the creation of public debt. The capital deficiency of underdeveloped countries is again reduced. The prevailing unutilised economic resources and idle manpower are activated when public borrowings are used to finance the government investment projects to provide economic infrastructure for development of agriculture and industry. This will have favourable impact on growth of incomes and economic development.

**(xi) Economic Growth and Stability.** Public debt can be used as a compensatory fiscal device to bring about economic stability when the country suffers from unemployment or inflation. During the period of depression and unemployment, the economy requires enough of additional purchasing power. This can be done by open market purchase of government securities by the Central Bank. The central bank on purchase of these bonds pays in terms of cheques drawn on the commercial banks and when the recipients of these cheques deposit in the commercial banks, the latter finds their cash reserves increased and can create credit by a multiple of the additional reserves held. This will have an expansionary effect on the economy. The similar result is obtained when the debts are rapid. On the other hand, when the economy suffers from inflation, the need is to reduce the excess purchasing power. This can be done by sale of government securities or new issues of government bonds. The result will be the reverse of debt repayment or purchase of government bonds i.e. the contractionary economic activities. Thus, public debt can be used as an anti-cyclical fiscal policy to restore economic stability. Thus public debt can be a very powerful instrument in regulating the economy.

## DEBT BURDEN AND FUTURE GENERATION

It is legitimate debate whether the public borrowing shifts the burden on the shoulders of the future generation (leads to posterity). In this regard, it is argued that the repayment of debt through taxes will compel the future investment and productive activities. In this manner, the real burden of public debt is borne by the future generation. On the other side, the infliction of sacrifice upon present generation is totally unjust and undesirable. Thus, in order to find out the correct reply, different opinions on the subject have been detailed as under :

The traditional classical view maintains that through debt financing, it is the present generation which suffers a loss of resources. The future generation will suffer if the present generation reduces its saving in order to meet the debt finance and leaves a smaller amount of capital resources for the future. This will reduce the productive capacity of the coming generations and they will accordingly lose. In a real sense, current financing (specially in the case of war) requires resources immediately. As a matter of fact, the present generation has either to curtail its consumption or saving or both. If savings are reduced, the future generation has to suffer on account of reduced inheritance of capital stock. On the contrary, if present generation does not reduce its consumption, burden of public debt may pass on to the future generation.

**"The ability to engage in loan finance makes for irresponsibility in sovereign."**

Adam Smith

**"Nations, once they begin to borrow, would be able to resist until they reach the point of bankruptcy."**

David Hume

**"One of the most terrible scourges which was ever invented to affect a nation."**

Ricardo

**"The burden of a public debt is not something which can be thrown backward and forward through time and made to fall at will, wholly on one generation or wholly on another."** However, subsequent thinkers like Mill, Malthus, Sidgwick, Cairnes and others had some liberal views about the impact of public debt. In the words of Prof. Malthus, "The material debt is not the evil which it is generally supposed to be. Those who live on the interest from the national debt, like statesmen, soldiers and sailors contribute powerfully to distribution and demand....the debt, once created, is not a great evil."

Prof. Dalton

**"A loan is voluntary and supplied by willingness, taxation is levied on the willing and unwilling alike. To make things smooth for the present at the cost of future is not the duty of the wise and farsighted statesman. For making distinction between internal and external loans, from a purely financial point of view the source of loan is really immaterial. In any case, it is an immediate relief to the tax-payer to counter balance by greater change in future."**

Prof. C.E. Bastable

### MODERN VIEWS

Modern economists including J.M. Keynes, Harris, Hansen, Buchanan, Bowen, Davis, Musgrave, Kopt, Modigliani and others have challenged the version of classical economists and hold opposite opinion on the subject of burden of public debt. They submit that there is no shift of the basic burden to the future generation (posterity) because the same posterity

which pays the additional taxes will be benefitted from the repayment of the debt. Great world depression of thirties gave the way to the development of the new theory of public debt. Moreover, the classical theory of public debt also assumed full employment and unproductiveness of public expenditure as the basic pillars. Modern theory, on the other hand, is based on the assumption that public expenditure is never wasteful but it can be productive and essential means of increasing employment in the economy.

**"Once the economists, in a mere realistic mood, allowed for unemployment, assumed elasticity in monetary supplies and agreed that government expenditures could be productive and need not necessarily be wasteful."**

Prof. Harris

Prof. James Buchanan in his book '*Public Principles of Public Debt*' holds that a burden implies a compulsory sacrifice. In his opinion, the present generation of bond-holders subscribes to the public debt voluntarily which results no burden upon them. However, it is a burden on the future generations which will have to pay taxes compulsorily for its retirement and interest payments. He, thus, argues in favour of individual attitude where for him, it is a burden while subscribing to debt is not a burden. It must be remembered here that such an approach does not hold good for an economy because the debt burden consists in terms of the loss of resources either on the basis of voluntary or compulsory. In short, the burden of public debt can be shifted to the posterity.

Bowen, Davis and Kopt have taken another extreme position where the present generation chooses not to cut down its consumption pattern at all but finance the entire debt through reduced savings. Similarly, Franco Modigliani considers that debt financing by the government will necessarily lead to reduced capital stock with the future generations. Richard Musgrave's thesis tried to prove that the burden of loan financed government deficit can be shifted to the future generation. He assumed the existence of a long government project, cost of which is to be distributed equitably among those who make the use of it.

Recently, some eminent economists have openly refuted the no burden thesis and tried to establish the fact that public debt creation poses a burden and also be shifted to future generations. This type of reasoning has also been severely attacked. They pointed out their arguments in favour of no burden thesis. In this regard, Lerner held the opinion that "a statement that public debt does not matter, must be understood in the same sense as when a man who finds the rumour has converted a twisted ankle into a broken neck tells his friends that he is perfectly alright."

The question of shifting of burden has received renewed treatment in the hands of modern economists. There are at least three such theories which deserve special mention.

**They are explained in the following :**

(a) **Capital Stock Transfer Theory.** This theory is advocated by David Ricardo and A.C. Pigou. According to them, whether tax finance or loan finance will shift the burden to future generation will depend upon the extent of real capital inherited by it, consequent on the construction of public investment project. This is because welfare of future generation depends on the sacrifice of present consumption without which capital cannot be formed to build up larger productive base. The curtailment of current consumption, however, depends on the reaction of present generation to the withdrawal of real resources from the private economy for the purpose of public investment project.

Now, if the project is financed by taxation, the tax payers are more likely to curtail consumption because their disposable income is reduced. In such a case, it is important to note, investment is less likely to be curtailed. On the other hand, if the project is financed

by borrowed funds, i.e., through sale of government bonds, the bond-holders (i.e., lenders) are more likely to curtail investment than consumption. This is firstly, because, bonds can be easily monetised by selling them at any time in the money market and hence, they are as good as money. Due to this liquidity aspect, bond holders do not feel that lending has reduced their disposable income much. Secondly, they will not only get back the principal, but will also receive the agreed amount of interest income. This is another reason why bond holders may feel richer. Thirdly, even though loan finance carries with it the obligation of future generation to pay interest and repay the debt, no one is sure of the amount that he will have to pay in future. Since distant things appear smaller, the bond-holder is unable to assess his future obligation relating to the public debt though he is conscious about the estimated earnings from the debt. As a result of all this, the bond-holders think that they are now richer and, hence, are not likely to curtail consumption while purchasing government bonds which are more generally paid for with funds which would have otherwise been spent on investment.

As compared to tax finance, therefore, it is the loan finance that would curtail consumption. Since curtailment of current consumption will be less, the transfer of real capital stock of future generation will also be less. This will mean reduced future welfare. Hence, loan finance shifts burden to the future generation, while tax finance does not do so.

(b) **Welfare Attitude Theory.** Welfare attitude theory is advocated by Professor Buchanan. He holds that loan financing of public investment does shift the burden to the future generation. According to Buchanan, whether tax or loan finance will shift the burden to future generation depends on the attitude of the present generation towards their economic well-being consequent on the method of resource mobilisation. Thus, if the project is financed by tax resources, the tax payers feel worse off because tax is a compulsory contribution. Such compulsion will make tax payers feel deprived of their enjoyment of incomes and, hence, will result in reduction of aggregate welfare.

When repayment of public debt takes place in the future period, funds are diverted from tax payers to bond holders. The tax payers by virtue of their compulsory contribution do feel worse off. However, there is no reason for the bond-holders to feel better off because they are just exchanging now the less liquid assets i.e., bonds for more liquid cash in the same way they were not worse off by purchasing bonds at the time of lending funds to the government. Since in the future generation the bond-holders are not better off but tax payers are worse off, the aggregate welfare of society is reduced in the case of loan finance of the public investment project. Thus, public debt shifts the burden to future generation.

(c) **Inter-Generation Equity Theory.** This is perhaps the most convincing theory relating to the choice between loan finance and tax finance in providing for a public investment project. This is the latest advocacy relating to the issue and is advanced by Professor R.A. Musgrave. He does not find much justification in searching for reaction of the present generation to tax finance or loan finance. Musgrave goes by the justification that cost of the public investment project should be borne by the users in proportion to the benefit enjoyed. He makes out a case whereby he shows that it is the loan finance and not tax finance which distributes the cost of the project among beneficiary generations exactly in proportion to benefit enjoyed by them. Such inter-generation equity is never possible through tax finance.

To understand the theory, let us take the illustration of a public investment project whose services become available in equal instalments over three periods. Also suppose that the life span of each generation extends over to these three periods and that the population is stable. Let the project cost 900 units of money and we assume that the loans advanced

### PUBLIC ECONOMICS

by any one generation have to be rapid within its life span. Since the benefit accrues to three generations in a particular period and since the life of the project lasts for three periods, the distribution of cost among generations will be in proportions shown below :

<b>Period</b>	<b>Cost benefit to generations</b>			<b>Generation cost/benefit share</b>	
I	1	2	3	1	..... 1/9
II	2	3	4	2	..... 2/9
III	3	4	5	3	..... 3/9
				4	..... 2/9
				5	..... 1/9

Thus, during the life time of the project, the first and fifth generation each appears once, the second and fourth generation each appears twice, while the third generation appears thrice. Hence, if total benefit from the project is divided into nine equal parts, the first and fifth generation should each bear one-ninth of the cost, the second and fourth generation each must bear two-ninths of the cost and the third generation has to bear three-ninths of the cost. Loan finance will thus divide the total cost exactly in proportion to the benefit enjoyed.

## REDEMPTION OF PUBLIC DEBT

Redemption of public debt means repayment of a debt. Public debt is to be repaid by the government with the time fixed for its repayment just as the private individual or organisation has to repay the loan. It is better for the government to clear the debt as soon as possible because mounting public debt has a demoralising effect on the people apart from the fact that public debt is subject to higher rates of taxation. Therefore, the government in any case, should pay the interest on the loan although in some cases the principal amount is not repaid. If the government fails to honour its promise *i.e.* not paying the interest, its creditworthiness will be lost and it would not be in a position to raise new loans when circumstances warranted.

There are different methods used by a government to redeem its debt. Some methods are extreme ones such as repudiation of debt, while others may not be redeemed at all but payment of debt with the help of floating another debt.

**Thus, various methods of redemption of public debt which are commonly adopted are explained as follows :**

**1. Repudiation of Debt.** It is the easiest way for the government to get rid of the burden of payment of a loan. Similarly, it means that the government refuses to pay the interest as well as the principal. In such cases, government does not recognise its obligation to pay the loan. It is certainly not paying off a loan but destroying it. In a normal case, government does not do so as it is obvious that the government will shake its confidence among the people and also in the eyes of other nations. It also creates other problems that is, the government faces the difficulty in getting new loans. So in normal circumstances, a government does not want to repudiate its debt. But in extreme circumstances, a government may be forced to repudiate its internal or external debt obligations. Internally, it happens when the country is facing financial ruin, bankruptcy or change in political set up. Externally, when the government is facing the shortage of foreign exchange and if it is repudiated, this may bring social revolution, economic blockade and military action. This process is very dangerous. Debt repudiation is not popular in modern age. This practice was only adopted by U.S.A. after the civil war and the U.S.S.R. after the revolution. Repudiation is the most extreme method of redeeming debt. This type of policy should be avoided at all costs.

**2. Conversion of Loans.** Conversion of loans is another method of redemption of public debt. It means that an old loan is converted into a new loan. Under this system, a high interest public debt is converted into a low interest public debt. In this system, when the rate of interest in the market falls, the government gives notice to the lenders to take their money back, so they are compelled to accept the lower rate of interest. The government borrows more money to pay such debts at low rate of interest and pay to the lenders. In this way, the debt is not liquidated forever but high burden is replaced by a low burden debt. A decline in the rate of interest helps the government to some extent because the burden of debt is reduced. It also helps the tax-payers as they have to pay low rate of interest on

their debt. This method is held just to reduce the interest by conversion of public debt, as it helps the lender either to take money back or to get renewed at low rate of interest. In this way, conversion of a loan is always done through the floating of a new loan. Thus, the volume of public debt is not reduced. Prof. Dalton felt that debt conversion does relax the debt burden. However, a few important points should be kept in mind. They are (1) Conversion should be simple one. (2) Conversion may not increase the capital amount of public debt. (3) Close eye should be kept on rate of interest.

**3. Utilization of Budgetary Surplus.** When the government earns a surplus in the budget, it must be utilised for paying the debt. Surplus occurs when public reserve exceeds the public expenditure. But this method is rarely found. Generally, the government employs the budget surplus to purchase its own bonds from the market and securities from the people. This results in an automatic liquidation of its debt liability.

**4. Terminal Annuity.** In this method, government pays off the public debt on the basis of terminal annuity into equal annual instalments including interest along with principal amount. This is the easiest way of paying off the public debt. With the passage of time, burden of debt goes on decreasing and at the time of maturity, most of the amount is paid off. This method is almost similar to the sinking fund.

**5. Refunding.** It implies to issue of new bonds and securities by the government in order to repay the matured loans. It is, thus, a process of replacing maturing securities with new one. In some cases, bonds may be redeemed before the maturity date, when the government intends to rearrange the maturity of outstanding debts or when the current rate of interest is low. Generally, short term borrowings are made in anticipation of tax collection to meet current expenditure on long-term borrowing. But the excessive burden of new expenditure does not permit the retirement of the debt by means of revenue newly raised or by means of the long-term borrowing. Thus, it raises the necessity for refunding the loans by old lenders and renewing the loans at lower interest rates for future period. Usually, this method is resorted to at such a time when the burden is too heavy on the government and it is not in a position to raise funds from other sources.

This method possesses a major drawback of temptation of the government to postpone its obligation of debt redemption. This leads to continuous increase in burden in future.

**6. Compulsory Reduction in Rate of Interest.** Another method of debt redemption is the compulsory reduction in rate of interest. During the period of financial crisis, rate of interest is unilaterally reduced on the basis of compulsion. This method is not possible to adopt in the ordinary circumstances of the country.

**7. Additional Provision of Taxation.** Generally, new taxes are imposed to collect the revenue. These funds can be utilised to repay the loans as well as interest. With this method, redistribution of income can easily be transferred from tax payers to the hands of bond-holders.

**8. Year-wise Partial Repayment.** This is a method by which a part of debt is repaid every year from the budget revenues so that the total debt is paid off after some years. One difficulty, however, is that the budget should be surplus every year to do this. Otherwise, either fresh loans have to be floated in order to clear a part of the old debt or other expenditure programmes have to be sacrificed. This defect of the method can be reduced if the maturity structure of public debt can be properly managed through spread of maturity over longer periods for different debts. If, in this way, the average maturity is reduced to a manageable level, the year-wise partial repayment may prove to be a very useful method of redemption.

**9. Sinking Fund.** First of all, this method was established by Huge Walpole in England. Soon the practice was adopted by different countries. This method is the most systematic and best method of repaying public debt. It is used by almost all the governments of the world. In this system, the government establishes a separate fund known as '*sinking fund*'. A fixed amount of money is credited by the government to this fund. So by the time, the debt matures, the fund accumulates enough amount to pay off not only the principal amount of the debt but also the interest on the loan as well.

Sinking fund is of two types as (a) Certain Sinking Fund, and (b) Uncertain Sinking Fund. A 'Certain Sinking Fund' is one in which the government credits a fixed sum of money annually. 'Uncertain Sinking Fund', on the other hand, is one in which the amount is credited, when the government secures a surplus in the budget. There is one danger of this method i.e. a government who is in need of money, may not have the practice to wait till the end of the period of maturity but may utilise the fund for the purpose other than the one for which originally the sinking fund was instituted.

In modern times, the sinking funds are not accumulated. But some funds are kept every year for repayment of some part of the debt in the same year. The amount is not put in a fund allowed to be accumulated but is used every year either to pay off the bonds which are maturing or to buy off bonds from the market. In short, sinking fund is a slow method of debt redemption. Thus, Dalton prefers capital levy. He also prefers that sinking fund should be made from current revenue of the government and not out of loans.

**10. Capital Levy.** This method has been the most controversial method of debt repayment. Capital levy provides for imposing "all at once" tax on all the capital value possessions of the people. All capital goods are taxed above the capital possessions of minimum limit of value. This method has been suggested by economists like Ricardo, Pigou to levy the capital to pay heavy debts taken during the time of war and other emergencies.

"A country which has accumulated a large debt is placed in a most artificial situation. A country which has involved itself in the difficulties attending this artificial system would act wisely by ransoming itself from them at the sacrifice of any portion of its property which might be necessary to redeem the debt." Prof. Ricardo

"My own opinion throughout the controversy has been and still is, in favour of the levy as the best policy, on merits for dealing with the debt." Prof. Dalton

In this manner, the following arguments are put forward in favour of capital levy :

- (i) In capital levy, only the rich are affected and the poor are left untouched. The richer sections earn huge profits during war time through the rise in prices. Hence, they should be subjected to heavy taxation after the war for the repayment of war time debt.
- (ii) This is the only effective way of immediate liquidation of public debt through the imposition of capital levy on the richer sections.
- (iii) The burden of capital levy falls on those rich persons who are able to pay it and it satisfies the canon of equity.
- (iv) It does not create inflation.
- (v) Quick payment is possible.
- (vi) It is an important source of public revenue paying principal amount of loan and interest.

## **PRINCIPLES OF PUBLIC DEBT MANAGEMENT**

To quote Prof. Phillip E. Taylor, three general principles of debt management can be identified as :

- (a) The policies pursued must be able to extract from the public without undue coercion.
- (b) The extraction of loanable funds from the market and its repayment when debt is retired should not frustrate the smooth growth of the economy.
- (c) It should be so placed as to minimise the need to enter the market when it is inconvenient to do so.

However, the principles of debt management are elaborated as under :

**1. Minimum Interest Cost of Servicing Public Debt.** The first and foremost principle of debt management should be that the interest rates on the government obligations should be kept as minimum as possible. The structure of interest rates on securities on different maturities should be determined in such a manner so that it may put less burden on the economy. In other words, the cost of serving public debt should be minimum which, in turn, would have a less adverse effect on the willingness to work and save. If the average rate of interest is low, it will impose less burden by the way of transferring resources from tax payers to the bond-holders. But, here one thing must be kept in mind that low interest rate policy may create inflationary pressures when the economy is already operating under full employment.

**2. Satisfaction of the Investors.** It is agreed that public debt should be managed in such a manner that it must satisfy the needs of the investors. Such interests of the investor are concerned with the types of securities and terms issued. Therefore, without fulfilling the aspirations of the investors, the government may find hardship to issue securities. Moreover, they may create disturbances in the security markets for sales of such securities and bond-holders may cash their securities for one purpose or the other. Therefore, the government must offer attractive terms and conditions so that investors may invest their money in such securities.

**3. Funding the Short Term Debt into Long Term Debt.** Another principle of debt management is that it should help to convert short-term borrowings into long-term borrowings. But at the same time, it must take proper precaution that economic stability is not disturbed at all. Simultaneously, this operation must not be undertaken to raise the undue rate of interest in the long-run which adversely affects the rate and volume of private investment.

**4. Public Debt must be in co-ordination with fiscal and monetary policies.** For the proper implementation of the developmental schemes in the economy, co-ordination of public debt policy with fiscal and monetary policy must be there. In the long-run, it would lead to maintaining economic stability and economic growth. For example, if the government advises the central bank to follow how bank rate policy to keep the cost of interest payment on the public debt low, it may bring inflation and instability in the economic system of a country. Therefore, this situation can only be avoided if the public debt policy must be in co-ordination with the monetary policy.

**5. Proper Adjustment of Maturity.** The ideal principle of debt management is that it must have proper adjustment of maturity with a view to bring high degree of liquidity in the market. Thus, monetary authority should work out a scheme which does not induce the holders of the debt to monetise their debt obligations before maturity time.